Taurus - RAID

Dual-Bay Storage Enclosure for
3.5” Serial ATA Hard Drives

User Manual

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EN

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Chapter 1 - Introduction

Icon Key

Throughout this manual you will see icons on the left margin that denote either Notes or Special Remarks as outlined below:

General Notes and Tips

Remarks for PC users and Microsoft Windows OS

Remarks for Mac users and Apple Macintosh OS

The Pleiades Taurus

Features mentioned in this manual may vary between different models.

When it comes to raw power there is nothing to beat the new dual-bay Pleiades Taurus. Available in the classic Pleiades design, the Taurus is built strong and rugged, offering more than enough capacity to store all your digital media files. Not only that, the Pleiades Taurus can also back up and secure all of your data thanks to RAID protection. Great performance, great protection and great looks – only in the Pleiades Taurus.

Product Dimensions:	24.5cm x 13.3cm x 7.6cm
	9.65in x 5.23in x 3in

Available Interfaces

- Firewire 400/800 & USB 2.0 (RAID 0&1)
- Firewire 400/800 & USB 2.0 (RAID 0)
- eSATA

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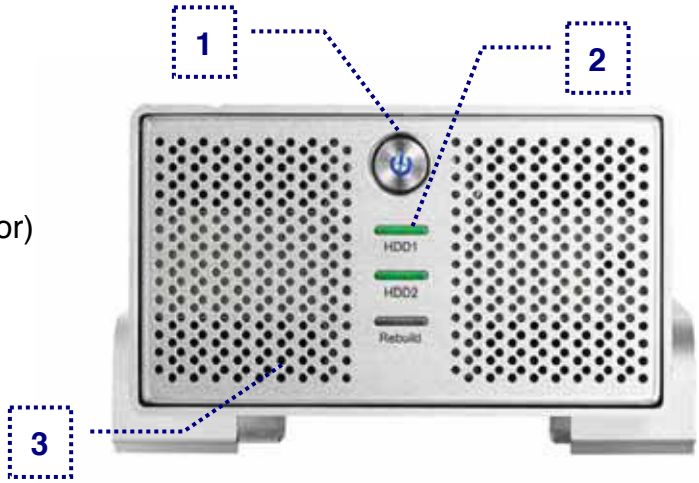
Detailed View

Front View

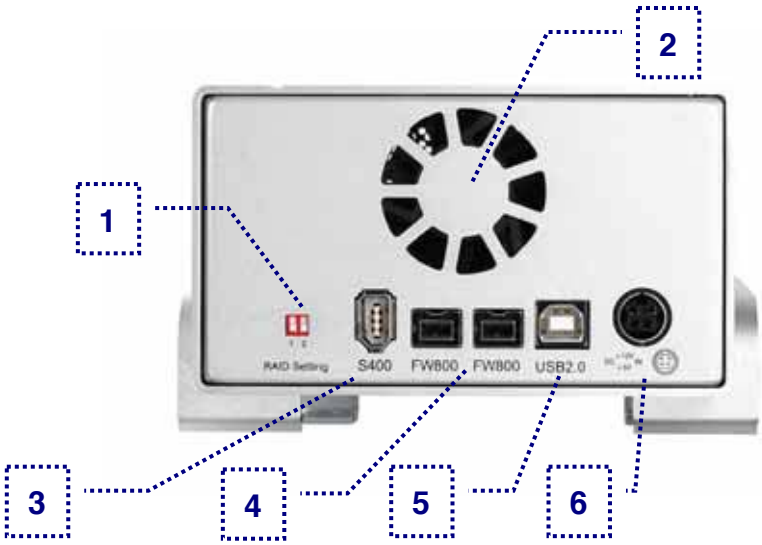
1. ON/OFF switch (blue when ON)
2. LED indication for hard drives
   (green for data access, red for error)
   and RAID rebuild function
   (yellow or green)
3. Ventilation holes



Note: To turn on the power, press the ON/OFF switch and release it. To turn it off, press the ON/OFF switch, hold it for 3 seconds and then release it again.

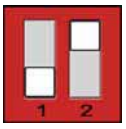
Rear View

1. Switch for RAID setting
2. Fan for ventilation
3. Firewire 400 port
4. Firewire 800 ports
5. USB 2.0 port
6. Power receptacle

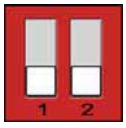


RAID Setting

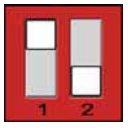
Non-RAID
1 = Up, 2 = Up



RAID 0 - Striping
1 = Down, 2 = Up



RAID 1 - Mirroring
1 = Down, 2 = Down



RAID 0 - Spanning
1 = Up, 2 = Down

Note: Changing the RAID setup will require you to re-format the drives. Make sure you backup all data before doing so!

System Requirements

PC Requirements

- Minimum Intel Pentium III CPU 500MHz, 128MB RAM
- USB 1.1 equipped PC; Win2000, WinXP or above
- USB 2.0 equipped PC; Win2000, WinXP or above
- 1394a equipped PC; Win98SE, Win2000, WinXP or above
- 1394b equipped PC; Win2000, WinXP or above

Mac Requirements

- Minimum Apple G3 processor (G4 for 1394b), 128MB RAM
- USB 1.1 equipped Mac; Mac OS 9.2, 10.1.5 or above
- USB 2.0 equipped Mac; Mac OS 10.2 or above
- 1394a equipped Mac; Mac OS 9.2, 10.1.5 or above
- 1394b equipped Mac; Mac OS 10.2 or above

Package Contents

Package Content may vary, depending on vendor & version.

- Pleiades Taurus
- External Power Adapter;
  Input 100-240V, Output +12V/3A, +5V/4.2A
- Power Cord
- Interface Cables
- Manual

About Data Backup

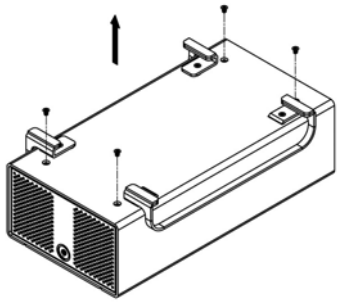
To protect your files and help prevent the loss of your data, we strongly recommend that you keep two copies of your data, one copy on your Taurus and a second copy either on your internal drive or another storage media such as DVD, Tape or an additional external drive. Any loss or corruption of data while using the Taurus is the sole responsibility of the user, and under no circumstances will the manufacturer be held liable for compensation or the recovery of this data.

Chapter 2 - Hard Drive Assembly

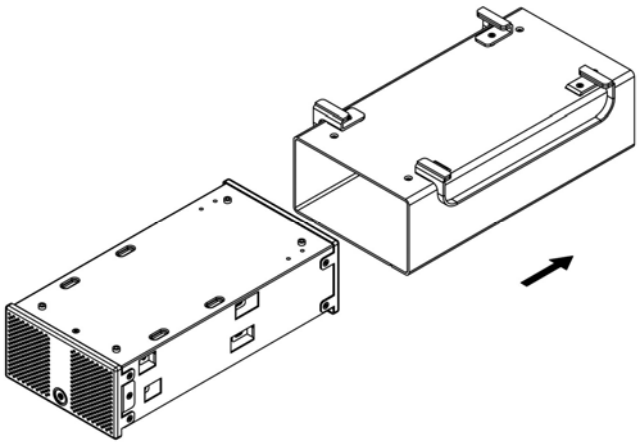
Your unit may come with a pre-installed hard drive. Before opening such an enclosure, please read the warranty and any other notes from your vendor carefully before doing so, as this could void your warranty.

The aluminium stand does not have to be removed for drive assembly.

1. Remove the four screws at the bottom of the case.

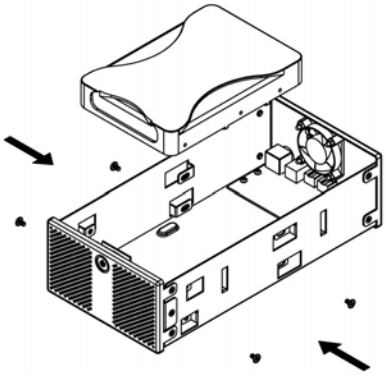


2. Push the inner enclosure out, and remove the outer chassis.



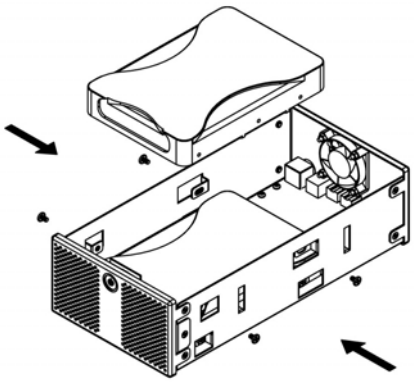
For RAID 0 and RAID 1, identical hard drives are recommended (same manufacturer, capacity and RPM)

3. Install the first hard drive and mount it with two screws on each side.



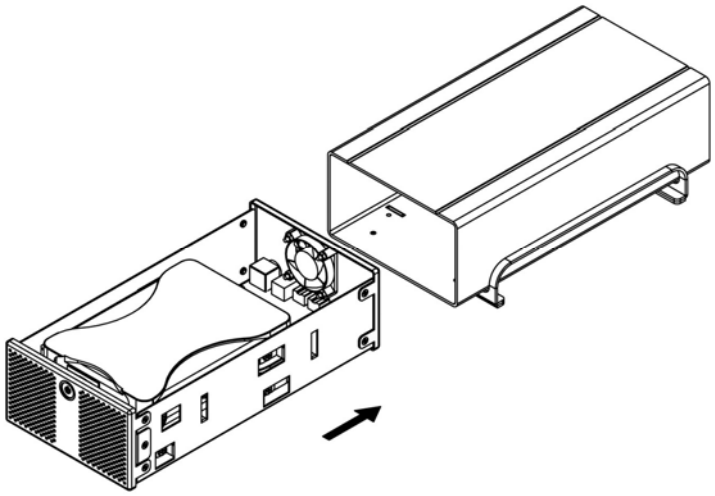
Be careful not to damage any cables or components, and make sure the cables are connected firmly.

4. Install the second hard drive and mount it with two screws on each side.

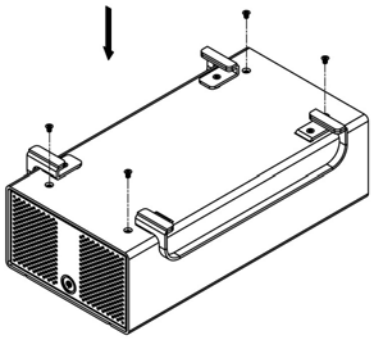


5. Connect the SATA and power cables to your hard drives. Be careful not to damage any components and confirm that the cables are connected firmly.

6. Slide the inner enclosure back into the outer chassis.



7. Fasten the four screws to finish the assembly.



Only one interface can be used at any given time.

Always connect the power adapter to your device before you plug it into the wall socket.

If you use a 6-pin Firewire cable, make sure not to insert the connector the wrong way around, or you will damage the device!

Changing the RAID setup will require you to re-format the drives. Make sure you backup all data before doing so!

Chapter 3 - System Set Up

Connection to your Computer

A few tips on how to use your external storage enclosure:

- Check the cables for visible damage before turning it on
- Do not expose the product to water or humid conditions
- Do not cover the enclosure's ventilation holes

Hard Disk Mode

When using your Taurus, the disk will mount to the first connection that is presented. This will remain the default setting until the device is next restarted.

When not in use, turn off the power. For the hard drives to go into stand-by with the Operating System, we recommend using SATA II hard drives set up as RAID 0 or RAID 1.

RAID Setup

Non-RAID: The drives will show up as two independent drives. Use this if you have only installed one drive or two different drives (not the same capacity and brand).

RAID 0 - Spanning: The two drives show up as one large single drive. Spanning is an array (not RAID) that is written sequentially across the two drives. By itself, it does not provide any performance or redundancy benefits.

RAID 0 - Striping: Used where speed is the primary objective, RAID Level 0 (also called "striping") is not redundant, and therefore does not technically conform to the definition of a RAID. This form of array splits each piece of data across both of the drives in segments; since data is written without any form of parity data-checking, it allows for the fastest data transfer of all other RAID levels. However, if one drive becomes damaged, the whole array can become corrupted.

RAID 1 - Mirroring: This mode requires 2 identical drives to implement. A RAID 1 creates an exact copy (or mirror) of a set of data on the second drive. This is useful when reliability and backup are more important than data capacity. The available capacity to the user will only be as large as a single drive but when one of the hard drives fails, it can be replaced and the data rebuilt automatically.

The Taurus enclosure has an LED indication at the front to show the status of the hard drives. As long as both HDD1 and HDD2 are working OK, the LED is green. When a drive fails, the corresponding LED will turn red. To replace the faulty drive, do the following:

The LED indication for HDD1 is referring to the HDD on top, where HDD2 is the one at the bottom.

1. Turn off the Taurus and remove both the power supply and the interface cable.
2. Open the enclosure and replace the faulty hard drive.
3. Finish the assembly and connect the power supply but do not connect the interface cable to your computer yet.
4. Turn the power ON and let it rebuild the data. If it rebuilds from HDD1 to HDD2, the rebuild LED will flash yellow, where from HDD2 to HDD1 it will flash green.
5. Wait for the rebuild LED to stop flashing.
6. When the rebuild is finished, connect the interface cable to your computer. Done.

Note: Rebuilding the data might take several hours, depending on the capacity of your hard drives. As reference, an 80GB HDD will take about 2 hours to rebuild.

If the system doesn't recognise the drive, turn on the power first, before connecting the interface cable or connect the device before booting your Operating System.

Installation on a PC

Before connecting the device, setup the RAID using the switches at the back of the enclosure. See page 2, 6 and 7 for more details about the RAID setup.

If the drives have been pre-installed and setup already, you do not need to change anything, unless you prefer a different setup.

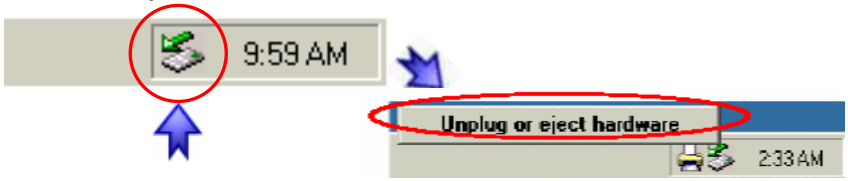
- Turn on your Computer and start Windows
- Connect the Taurus and turn it on
- Let Windows search and install the driver automatically
- Open "My Computer" to see your external hard drive

For factory new drives and more info about formatting, see "Partitioning & Formatting".

Remove Procedure

For the safe removal of your drive and to assure that no data is lost, always follow the correct unplug procedure. Otherwise, an error message will appear.

- Click on the taskbar icon for external hardware
- Choose your external hard drive and confirm to remove it



If the system doesn't recognise the drive, turn on the power first, before connecting the interface cable or connect the device before booting your Operating System.

Installation on a Macintosh

Before connecting the device, setup the RAID using the switches at the back of the enclosure. See page 2, 6 and 7 for more details about the RAID setup.

If the drives have been pre-installed and setup already, you do not need to change anything, unless you prefer a different setup.

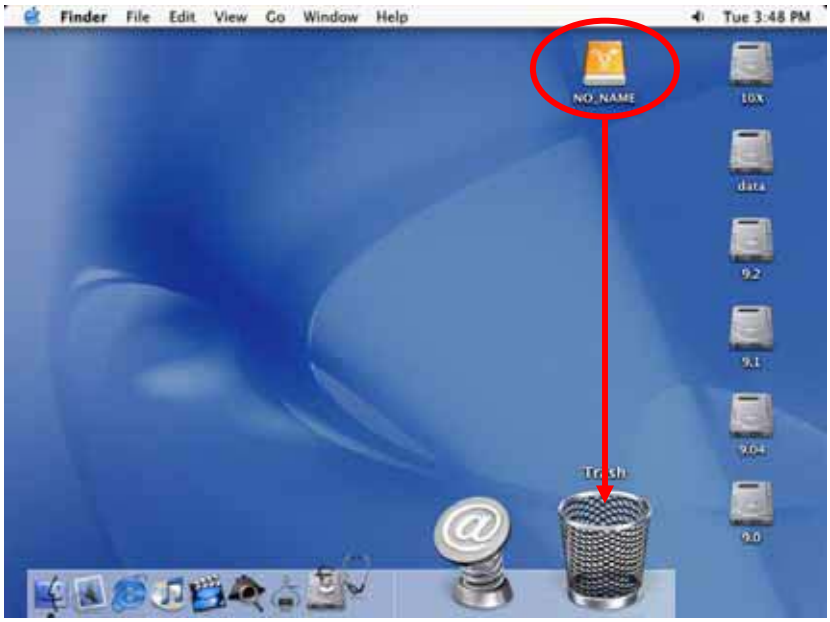
- Turn on your computer and start Mac OS
- Connect the Taurus and turn it on
- No driver installation required
- The external drive will mount and show up on your desktop

For factory new drives and more info about formatting, see "Partitioning & Formatting".

For the safe removal of your drive and to assure that no data is lost, always follow the unplug procedure.

Remove Procedure

- Drag the external hard drive icon into the trash bin
- Turn off your device



You can choose to create several partitions but be aware that if you want to change this at a later point, it's required to format the drive again or use 3rd party software.

Win98SE and WinME do not recognise NTFS formatted drives, so if you want to use your drive on those platforms, we recommend you to use FAT32 instead.

If you use this device to backup your data using a 3rd party software running MS-DOS, we recommend you to format the drive using FAT32.

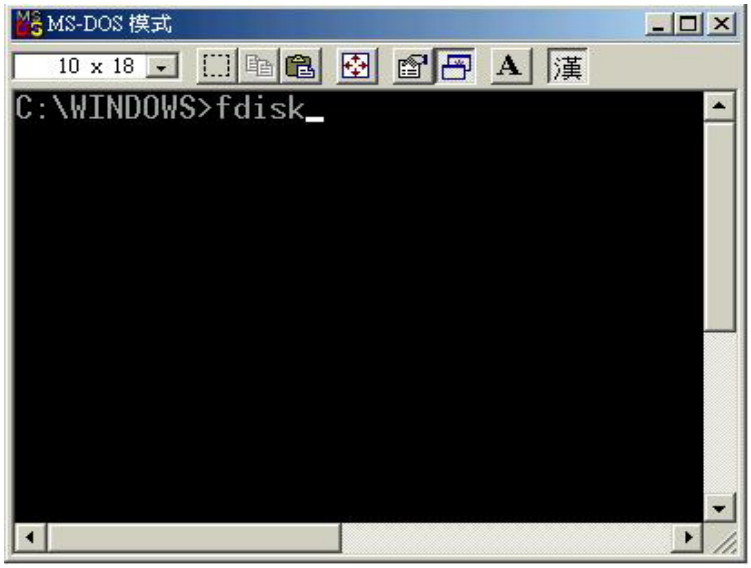
Partitioning & Formatting

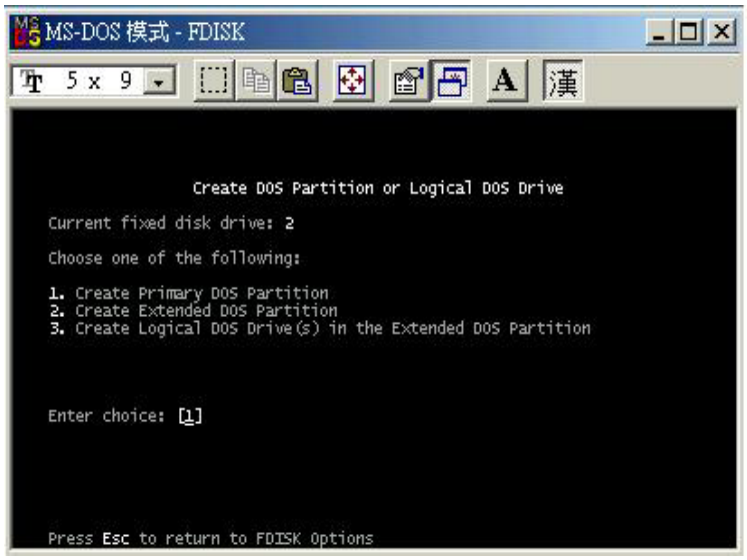
Be aware that this will destroy all your existing data on the drive, so make sure you have a backup! This step is usually only required the first time you install a factory new hard drive, if you change the format or want to erase all data on your drive.

PC running Win98SE or WinME

MS-DOS command "fdisk" (press Enter to confirm)

- Type "fdisk" and press Enter
- Select "Y" and press Enter
- Enter "5" to change the drive
- Select the drive you want to format
- Choose "1" and follow the onscreen instructions





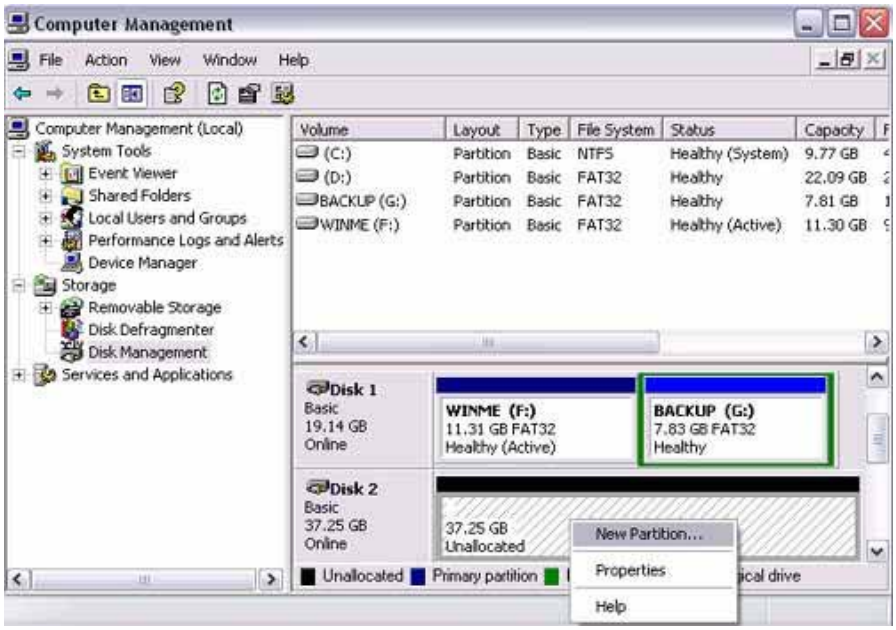
If the drive does not appear, make sure the drivers are installed properly and the power is turned on!

Mac OS can not write to NTFS formatted drives. To use your device on both platforms, we recommend you to use FAT32.

PC running Win2000 or WinXP

Disk Management Program

- Right click on “My Computer” and choose “Manage”
- Select “Disk Management”
- Choose the drive you want to format and right click on it for further commands (Choose New Partition)
- Follow the Partition Wizard



For Win2000 or WinXP, we recommend formatting the drive using the NTFS file system.

If you are using the FAT32 file system to format the drive on Win2000 or WinXP, the biggest single partition you can create will be 32GB. To create larger partitions, you need to use the DOS command under Win98SE or WinME or change to NTFS format.

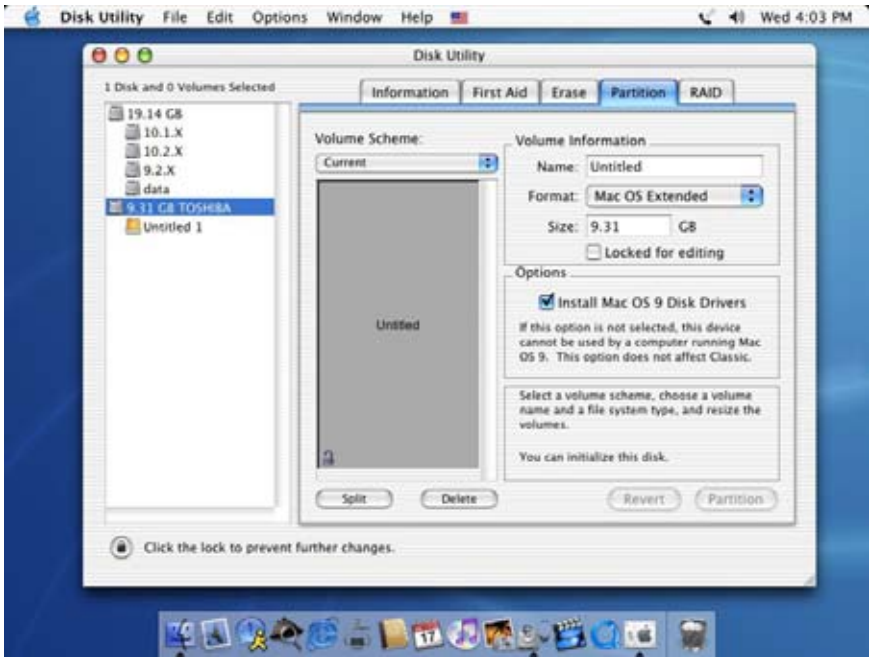
If the drive does not appear on the desktop, make sure there are no extension conflicts and the power is turned on!

Mac OS

Mac OS9.2 and earlier, does not support creating multiple partitions on an external drive. To do that, you would need to purchase additional 3rd party software or upgrade to OS X. Initializing the drives can be done on all Operating Systems.

For Mac OS X, use the Disk Utility to format and create partitions on your external disk.

- Select “Disk Utility” in the utilities folder
- Choose your external drive and format it according to your requirement



For Mac OS X, we recommend formatting the drive using the native Mac file system HFS+ also known as Mac OS Extended.

If you want to use your drive on a PC running Microsoft Windows as well as on your Mac, we recommend you to use a PC to format the drive. Choose FAT32 when formatting and do not change anything on the partition or format on your Mac. Otherwise, the PC might not be able to recognise the drive anymore.

Please read your warranty carefully, as this may vary between different vendors!

Chapter 4 - Appendix

Technical Questions

For RMA and other questions, please contact your vendor or check out their online support area!

FAQ

Q: What file system should I choose to format my drive?
A: This will depend on how you want to use the drive but in general, here is what we recommend:

- Win2000 & WinXP → NTFS
- Mac OS X → HFS+ (Mac OS Extended)
- To use it on both PC and Mac → FAT32

About this Manual

This manual covers the generic version of the Taurus RAID. Firmware, images and descriptions might slightly vary between this manual and the actual product you have.

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